

# Fact Sheet



## For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

(Group 7 of 8)  
(1-Naphthol)

Permit Number: **R30-03900007-2011**  
Application Received: **March 3, 2011**  
Plant Identification Number: **03900007**  
Permittee: **Bayer CropScience**  
Facility Name: **Institute Site**  
Mailing Address: **P.O. Box 1005**  
**Institute, WV 25112**

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Physical Location: Institute, Kanawha County, West Virginia  
UTM Coordinates: 432.0 km Easting • 4,248.3 km Northing • Zone 17  
Directions: The facility is located west of Institute, WV, adjacent to State Route 25 and West Virginia State College.

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### Facility Description

Bayer CropScience, an agricultural chemical based company, operates a multi-product, multi-process chemical plant. The Plant has five basic manufacturing units along with several other production facilities primarily responsible for producing raw materials used in the manufacture of agricultural chemicals. The principal products produced at the Institute site are SEVIN brand carbaryl, TEMIK brand aldicarb, LARVIN brand thiodicarb, methomyl, RHODIMET AT-88, oxamyl, BPMC, Carbofuran, and Carbosulfan. SIC Codes: 2879; 2869

### Group Description

The facility was divided into 8 Title V Permits. They were broken down as follows:  
Group 1 – Powerhouses, Maintenance, Wastewater Treatment Unit, Laboratories  
Group 2 – Rhodimet  
Group 3 – Carbofuran Unit, Carbosulfan Unit  
Group 4 – Aldicarb, BPMC, Oxamyl  
Group 5 – Polymers (Note this process was closed in 2004 and no Title V Group 5 Permit was issued)  
Group 6 – Larvin Unit  
Group 7 – Naphthol Unit, PANA, Jet

Group 8 – Phosgene, MIC, SEVIN

**Emissions Summary**

<b>Plantwide Emissions Summary [Tons per Year]</b>		
<b>Regulated Pollutants</b>	<b>Potential Emissions (Group 7)</b>	<b>2010 Actual Emissions (Facility Wide)</b>
Carbon Monoxide (CO)	6.13	82
Nitrogen Oxides (NO <sub>x</sub> )	74.80	2,310
Particulate Matter (PM <sub>10</sub> )	<0.01	21.1
Total Particulate Matter (TSP)	0.88	42.2
Sulfur Dioxide (SO <sub>2</sub> )	0.11	2,451
Volatile Organic Compounds (VOC)	30.34	123.9
<i>PM<sub>10</sub> is a component of TSP.</i>		
<b>Hazardous Air Pollutants</b>	<b>Potential Emissions (Group 7)</b>	<b>2010 Actual Emissions (Facility Wide)</b>
Total HAPs	3.7	131.99

*Some of the above HAPs may be counted as PM or VOCs.*

**Title V Program Applicability Basis**

This facility has the potential to emit 459 TPY of CO, 6,951 TPY of NO<sub>x</sub>, 185 TPY of PM<sub>10</sub>, 11,143 TPY of SO<sub>2</sub>, 620 TPY of VOC, and 920 TPY of Total HAP. Due to this facility's potential to emit over 100 tons per year of CO, NO<sub>x</sub>, PM<sub>10</sub>, SO<sub>2</sub>, VOC, over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAP, Bayer CropScience is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

**Legal and Factual Basis for Permit Conditions**

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Group 7 at this facility\* has been found to be subject to the following applicable rules:

- |                    |                   |  |
|--------------------|-------------------|--|
| Federal and State: | 45CSR2            | Particulate Matter emissions                   |
|                    | 45CSR6            | Open burning prohibited                        |
|                    | 45CSR10           | SO <sub>2</sub> Air Emissions                  |
|                    | 45CSR11           | Standby plans for emergency episodes.          |
|                    | 45CSR13           | Permits for Construction of Stationary Sources |
|                    | 45CSR§21-5, 9, 41 | Emission of VOC's                              |

	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	45CSR34	Emission standards for HAPs
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 63, Subparts F, G, H	Hazardous Organic NESHAP (HON)
	40 C.F.R. Part 63, Subpart FFFF	Miscellaneous Organic NESHAP (MON)
	40 C.F.R. Part 63, Subpart DDDDD	NESHAP for Boilers and Process Heaters
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.
	45CSR21-37, 40	Volatile Organic Compound Emissions
	45CSR27	Toxic Air Pollutants

\*Other groups at this facility may be subject to additional applicable state and federal rules.

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

**Active Permits/Consent Orders**

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (if any)
R13-223	5/28/1976	
R13-226	5/21/1976	
CO-27-92-12	4/30/1992	
CO-21-97-4	2/19/1997	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

**Determinations and Justifications**

Changes made to the most recent version to this Title V Permit are summarized below:

- 45CSR40 – CAIR NOx Season Trading Program  
 Previous Condition 3.1.9 addressed the NOx Budget Trading Program from 45CSR1. The trading program per 45CSR1 has since been repealed and replaced with the CAIR NOx Ozone Trading Program from 45CSR40. However, the emissions sources that fall under 45CSR40 for this facility are three boilers,

which are regulated under the Group 1 Permit. Therefore, this requirement has been removed from this Group 7 Permit.

2. Miscellaneous

Added Table 1.2 and other changes have been made to the Permit boilerplate.

3. 40 C.F.R. Part 63, Subpart DDDDD NESHAP for Boilers and Process Heaters

Added 40 C.F.R. 63, Subpart DDDDD (Boiler MACT) Requirements for Dowtherm Furnaces #1 and #2 [254A and 254B, respectively]. On February 21, 2011, EPA signed the final rule for the Boiler MACT. This rule was published in the Federal Register on March 21, 2011 which established the existing source compliance date as March 21, 2014. The Dowtherm Furnaces are natural gas and/or hydrogen-fired with a heat input of greater than 10 MMBtu/hr each. The 40 C.F.R. 63, Subpart DDDDD placeholder language was included as Condition 4.1.16.

On May 18, 2011 EPA published a Federal Register final rule (76 FR 28662-28664) staying 40 CFR 63, Subpart DDDDD in its entirety along with an indefinite delay of its effective date. This EPA action reads in part:

“II. Issuance of a Stay and Delay of Effective Date

Pursuant to section 705 of the APA, the EPA hereby postpones the effectiveness of the Major Source Boiler MACT and the CISWI Rule until the proceedings for judicial review of these rules are complete or the EPA completes its reconsideration of the rules, whichever is earlier. By this action, we are delaying the effective date of both rules, published in the Federal Register on March 21, 2011 (76 FR 15608 and 76 FR 15704). The delay of the effective date of the CISWI Rule applies only to those provisions issued on March 21, 2011, and not to any provisions of 40 CFR part 60, subparts CCCC and DDDD, in place prior to that date. This delay of effectiveness will remain in place until the proceedings for judicial review are completed or the EPA completes its reconsideration of the rules, whichever is earlier, and the Agency publishes a notice in the Federal Register announcing that the rules are in effect.”

### Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

1. 40 C.F.R. Part 64 - Compliance Assurance Monitoring (CAM)

Group 7 is not subject for the following reasons:

40CFR§64.2(a)(3) – This Group does not have a potential pre-control device equal to or greater than 100 percent of the amount, in tons per year, of any pollutant that would require the facility to be classified as a major source.

2. Greenhouse Gas Tailoring Rule

This is a renewal Title V Permit and there have been no changes that would have triggered a PSD permit. As such, there are no applicable GHG permitting requirements.

### Request for Variances or Alternatives

None

### Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

### Comment Period

Beginning Date: October 18, 2011

Ending Date: November 17, 2011

All written comments should be addressed to the following individual and office:

Mike Egnor  
Title V Permit Writer  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304

**Procedure for Requesting Public Hearing**

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

**Point of Contact**

Mike Egnor  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
Phone: 304/926-0499 ext. 1208 • Fax: 304/926-0478

**Response to Comments (Statement of Basis)**

Not applicable.